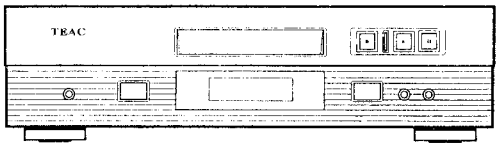
V24826

TEAC



# SERVICE MANUAL

# CD-3

## Compact Disc Player

COMPACT disc DIGITAL AUDIO

## CONTENTS


1 SAFETY INFORMATION ..... 2
2 SPECIFICATIONS ..... 3
仕　様
3 CASE AND FRONT PANEL REMOVAL ..... 4
外装部品の外し方
4 ADJUSTMENT AND CHECKS ..... 5
調整と確認
5 EXPLODED VIEWS AND PARTS LIST ..... 12
分解図とパーツリスト
6 PC BOARDS AND PARTS LIST ..... 16
基板図とパーツリスト



Effective : June 1994

5704069000

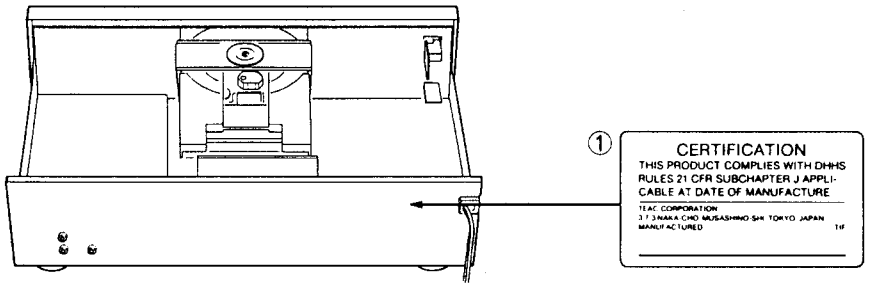
# 1 SAFETY INFORMATION

## SAFETY INFORMATION

This product has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1, subchapter J, based on the Radiation Control for Health and Safety Act of 1968", and is classified as class 1 laser product. There is not hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings.
The label required in this regulation is shown ①.

**CAUTION**

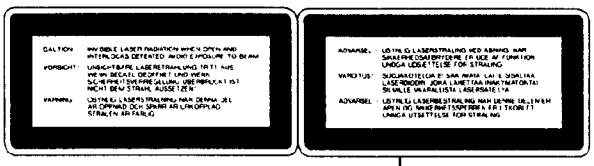
- If you remove the above-mentioned housings under the operating state of the product, there is a possibility of human access to the invisible laser radiation emitted from the optical pickup.
  Pay careful attention, not to let the invisible laser beam enter into your eyes.
- If you find a troubled state of the laser diode, change to the specified new optical pickup.
- If you find a troubled state of safety interlock parts, change to the same type parts described in parts list.

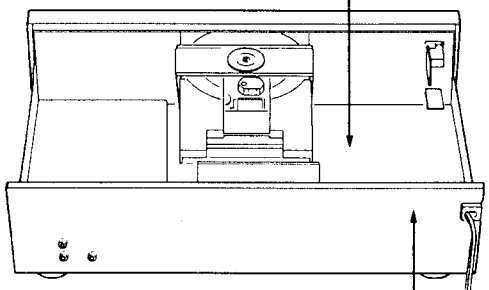

①
CERTIFICATION
THIS PRODUCT COMPLIES WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE
TEAC CORPORATION
MANUFACTURED

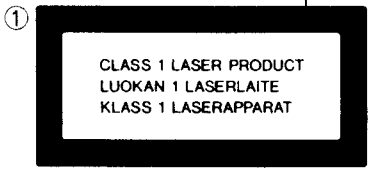
**Optical pickup:** Type : KSS-210A
Manufacturer : SONY Corporation
Laser output : Less than 0.4 mW on the objective lens
Wavelength : 760 – 800 nm

## • CAUTION • ACHTUNG • OBSERVERA • ADVARSEL

②








① THIS LABEL IS ATTACHED TO THE PLACE AS ILLUSTRATED TO INFORM THAT THE APPARATUS CONTAINS A LASER COMPONENT.

① DIESE AUFKLEBEMARKE IST AN DEM IN DER ABBILDUNG GEZEIGTEN ORT ANGEBRACHT UM DARAUF HINZUWEISEN, DASS IM INNERN DES GERÄTS EINE LASER-KOMPONENTE BEFINDET.

① PÅSKRIFTEN SITTER PÅ APPARATEN SOM VISAS SOM UPPMANING OM ATT APPARATEN OMFATTAR EN INBYGGD LASERKOMPONENT.

① DETTE MÆRKAT ER ANBRAGT SOM VIST I ILLUSTRATIONEN FOR AT ADVARE BRUGEREN OM AT APPARATET INDEHOLDER EN LASERKOMPONENT.

② DETTE MÆRKAT ER SOM VIST PÅ ILLUSTRATIONEN ANBRAGT PÅ INDERSIDEN AF TOPDÆKSLET FOR AT ADVARE BRUGEREN OM AT YDERLIGERE FREMTRÆNGEN VIL VÆRE FORBUNDET MED FARE FOR AT UDSÆTTE SIG FOR LASERSTRÅLING.

ADVARSEL - BETJENING AF ANDRE KONTROLLER OG REGULATORER ELLER BENYTTELSE AF ANDRE FREMGANGSMÅDER END BESKREVET HERI ER FORBUNDET MED FARE FOR USDÆTTELSE FOR LASERSTRÅLING.

VARNIG: APPARATEN INNEHÅLLER LASER KOMPONENT MED STRÅLNING ÖVERSTIGANDE KLASS 1

"ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING NAR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLING."

"VAROITUS! SUOJAKOTELOA EI SAA AVATA. LAITE SISÄLTÄÄ LASERDIODIN. JOKA LÄHETTÄÄ (NÄKYMÄTÖNTÄ) SILMILLE VAARALLISTA LASERSÄTEILYÄ".

ADVARSEL: USYNLIG LASERBESTRÅLING NÅR DENNE DELEN ER ÅPEN OG SIKKERHETSSPERREN ER UTKOBLET UNNGÅ UTSETTELSE FOR STRÅLING.

# 2 SPECIFICATIONS
## 仕　様

| | |
|---|---|
| **AUDIO** | |
| **Number of Channels** | 2 |
| **Frequency Response** | 1 – 20,000Hz ± 0.5dB |
| **Signal to Noise Ratio** | Better than 104dB (1kHz) |
| **Dynamic Range** | Better than 97dB (1kHz) |
| **Harmonic Distortion** | 0.0022% (1kHz) |
| **Wow and Flutter** | Unmeasurable (Quartz accuracy) |
| **Channel Separation** | Better than 102dB (1kHz) |
| **Output Analog** | 1.7Vrms |
| **Digital** | 0.5Vp-p/75Ω (Coaxial) |
| **Headphone** | 10mW/33Ω |
| **D/A Converter** | "Bitstream" conversion |
| **Digital Filter** | 8-times oversampling 20-bit digital filter |
| **Analog Filter** | 3rd order Butterworth filter |
| **PICK UP** | |
| **Type** | Optical 3-Beam laser pickup |
| **Objective Lens** | 2-dimensional parallel drive |
| **Laser Type** | GaAlAs type semiconductor laser |
| **Wave Length** | 780nm |
| **SIGNAL FORMAT** | |
| **Sampling Frequency** | 44.1kHz |
| **Quantization Bit** | 16-bit linear/channel |
| **Channel Bit Rate** | 4.3218Mb/sec |
| **Channel Modulation Code** | EFM (Eight to Fourteen Modulation) |
| **Error Correction** | CIRC (Cross Interleave Reed Solomon Code) |
| **GENERAL** | |
| **Power Requirements** | 120/230V AC, 50 – 60Hz<br>(General Export Model)<br>120V AC, 60Hz<br>(USA/Canada Model)<br>230V AC, 50Hz (Europe Model)<br>240V AC, 50Hz<br>(UK/Australia Model) |
| **Power Consumption** | 10 watts |
| **Dimensions (W × H × D)** | 447 × 124 × 276mm<br>(17-5/8" × 4-7/8" × 10-7/8") |
| **Weight (net)** | 3.8kg (8-3/8 lbs) |
| **Standard Accessories** | Wireless Remote Control Unit (RC-532 : for Gold-finish version or RC-531 : for Black finish version) × 1, RCA pin-plug cord, Battery (SUM-4, "AAA", "R03" type) × 2 |

● Improvements may result in specification or feature changes without notice.

| | |
|---|---|
| 〈オーディオ〉 | |
| オーディオチャンネル数 | 2チャンネル |
| 周波数特性 | 1～20,000Hz ± 0.5dB |
| SN比 | 104dB以上(EIAJ) |
| ダイナミックレンジ | 97dB以上(EIAJ) |
| 高調波歪率 | 0.0022%以下(EIAJ) |
| ワウ・フラッター | 測定限界値以下(水晶発振精度) |
| チャンネルセパレーション | 102dB以上(EIAJ) |
| アナログ出力 | 1.7Vrms |
| デジタル出力 | 0.5Vp-p/75Ω(COAXIAL) |
| ヘッドホン出力 | 10mW(33Ω負荷) |
| D/Aコンバーター | ビットストリーム |
| デジタルフィルター | 8倍オーバーサンプリング<br>20ビットデジタルフィルター |
| アナログフィルター | 3次バターワースフィルター |
| 〈ピックアップ〉 | |
| 方式 | 対物レンズ駆動、光学式3ビーム |
| 対物レンズ駆動方式 | 2次元平行駆動 |
| 光源 | 半導体レーザー |
| 波長 | 780nm |
| 〈信号フォーマット〉 | |
| 標本化周波数 | 44.1kHz |
| 量子化ビット数 | 16ビット・リニア/チャンネル |
| 伝送レート | 4.3218Mb/sec |
| 変調方式 | EFM |
| エラー訂正方式 | CIRC |
| 〈一般〉 | |
| 電源 | 100V AC 50-60Hz |
| 消費電力 | 10W |
| 外形寸法 | 447 × 124 × 276mm(W × H × D) |
| 重量 | 3.8kg |

付属品
- ワイヤレスリモコン RC-531またはRC-532
- ピンプラグコード
- 乾電池(単4, SUM-4)×2
- 取扱説明書

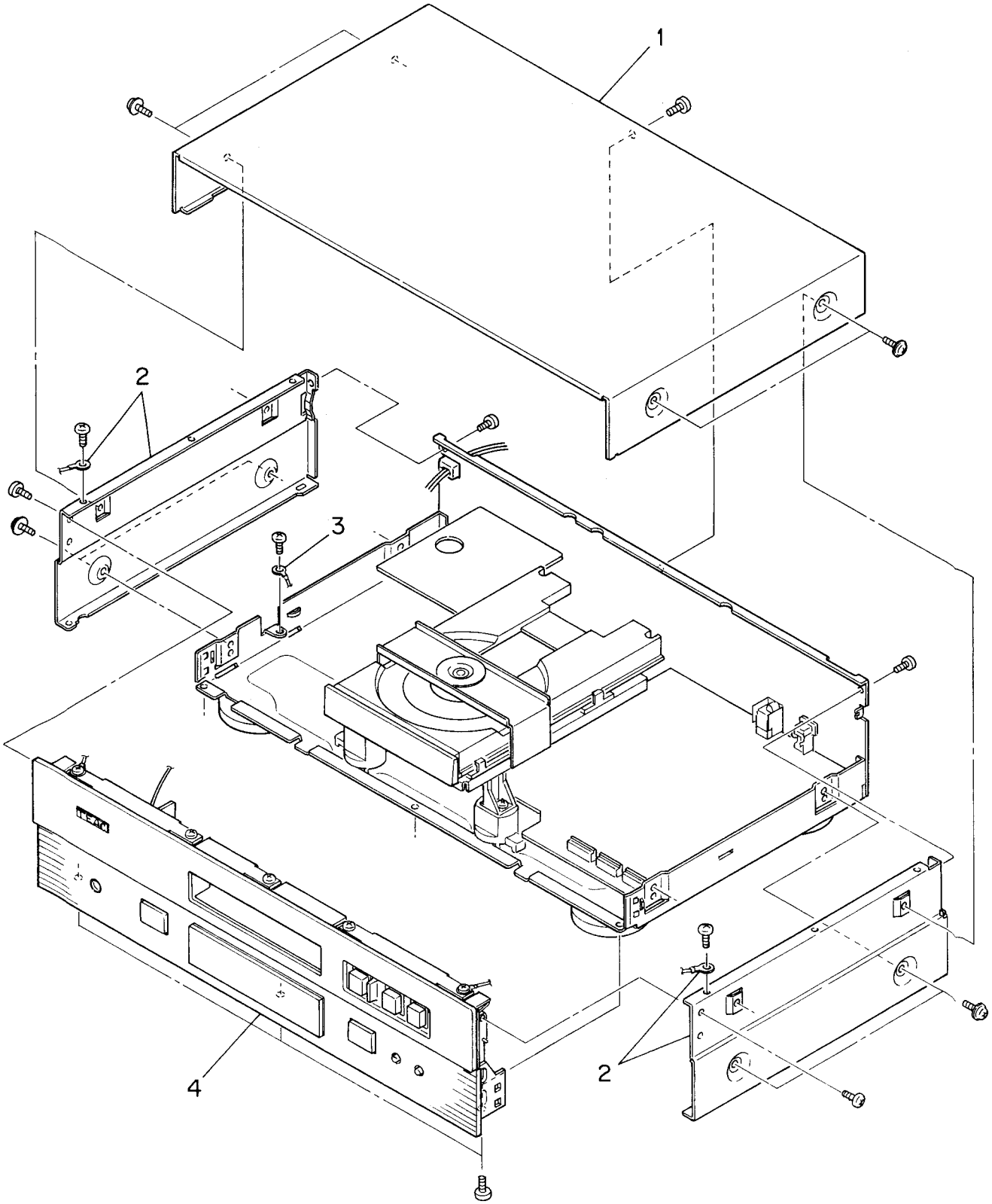
＊仕様および外観は、改善のため予告なく変更することがあります。

# 3 CASE AND FRONT PANEL REMOVAL

外装部品の外し方

Disassemble in number-order

番号順に外してください



# 4 ADJUSTMENT AND CHECKS
## 調整と確認

### 1. Replacement of the pickup assembly

- Before removing the pickup assembly be sure to solder -bridge where indicated in the inset (Fig. 4-1) to prevent the laser diode from being electrostatically damaged. After replacing the pickup assembly, be sure to unsolder the antistatic bridge. Or else the laser diode does not function.
- Before servicing the pickup assembly be sure to prevent electrostatic-inducer destruction by grounding not only test equipment in use but also yourself as shown in Fig. 4-2.
  * Electrostatic charge drastically shortens the operating life of the laser diode or possibly results in its destruction.
- During the transportation, mounting and dismounting of the assembly, support with your fingers at points A and B as shown in Fig. 4-3. Be particularly careful not to touch the actuator, photosensor and LD plate and do not apply force to them.
- Soldering must be done quickly at less than 30W, 320℃.
- Don't disassemble the pickup ass'y.
- Don't apply shock to the pickup ass'y.
- Don't place the assembly in a place subject to excessive dust, heat or moisture.

### 1. ピックアップASSYの交換

- ピックアップASSYを外すときは、レーザーダイオードの静電破壊防止のため、必ず斜線部分(Fig. 4-1)を半田ブリッジしてから作業をしてください。また、取り付ける場合も取り付けた後に半田ブリッジを外してください。
  半田ブリッジをしたままではレーザーダイオードは動作しません。
- ピックアップASSYを取り扱う場合は、測定器などに確実なアースを取ると共に、人体アースを行ない、静電破壊を十分防止してください。(Fig. 4-2)
  ＊レーザーダイオードは、静電気が加わると寿命が著しく低下したり、または破損しますので十分注意してください。
- 取り付け、取り外し、持ち運びの際は、Fig. 4-3のA部とB部で支えてください。特にアクチュエーター、光検出部、LDプレート部は、手を触れたり力を加えたりしないでください。
- 半田ゴテは30W, 320℃以下を使用し、すばやく処理してください。
- ピックアップASSY本体の調整および分解などはしないでください。
- ピックアップASSYに落下・衝撃は加えないでください。
- ゴミ・ホコリなどの発生する場所、高温・多湿の場所は避けてください。

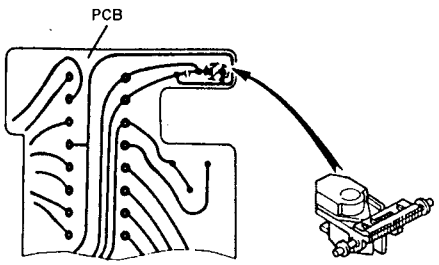



Fig. 4-1

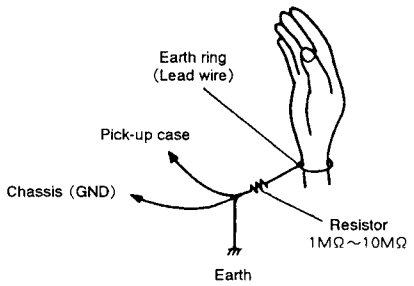



Fig. 4-2

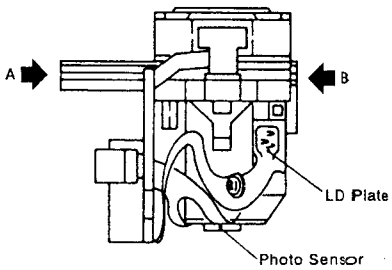



Fig. 4-3

### 2. Objective

- Laser beams are similar to infrared rays. Don't look at the beams directly and keep your eyes at least 30cm away from them.
- Don't touch the objective with fingers.
- If objective becomes dirty, playback will deteriorate. To clean the objective, moisten a good cleaning tissue, such as made by KODAK, in isopropyl alcohol and wipe the objective gently. Wipe off and excess fluid with a dry cleaning tissue.

### 2. 対物レンズについて

- レーザー光は近赤外線の為目視は困難です。目の安全の為、目をレンズから30cm以上離してください。
- レンズには手を触れないでください。
- レンズに汚れが付くと再生能力が低下しますので、次のように清掃してください。
  レンズクリーニングペーパー（KODAK社製など）に、イソプロピールアルコール（I.P.A）を浸して清掃をし、液が残らないように必ず拭きとってください。

### 3. Laser diode check
〔Iop (Intensity Optimum) check〕

Connect a DC voltmeter between TP1 and TP2 on MAIN PCB. Measure the DC voltage while playing a disc to check that the measured value does not exceed the Iop value indicated on the pickup by 5mA. 〔I = measured value/22〕 If the measured value is higher than that indicated, the pickup may be damaged.

* Pay special attention that parts are not damaged by static electricity.

### 3. レーザーダイオードの破損チェック
〔Iop (Intensity Optimum) 値確認〕

(ピックアップ交換時には必ず実行のこと)
DC ボルトメーターをMAIN PCB の TP1, TP2 に接続する。PLAY 中の直流電圧を測定し、その電圧から電流換算した値〔I = 測定電圧/22〕がピックアップに表示してあるIop値より5mA以上増加していないことを確認する。増加の場合は、破損している可能性がある。

*静電破壊に十分注意すること。

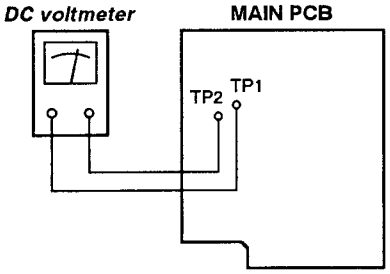
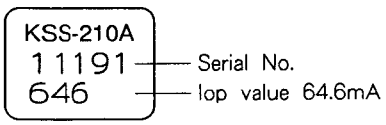
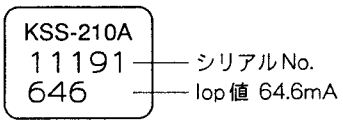



Fig. 4-4

● How to read numbers on sticker attached to the pickup
(Example)



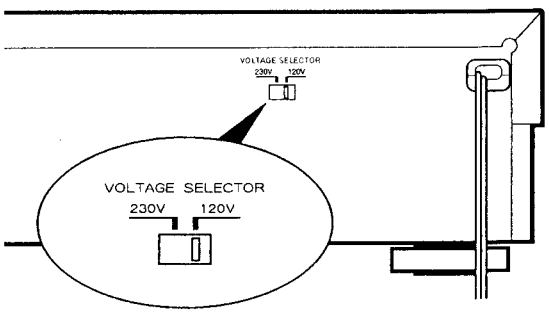

● ピックアップ添付シールの読み方
(例)




## VOLTAGE CONVERSION
(For general export/U.S.A./Canada models)

Be sure to remove the power cord from the AC outlet before repositioning the voltage converter switch.

1. Locate the voltage selector on the rear panel.
2. Using a flat-bladed screwdriver, set to the appropriate 230 V or 120 V position according to your area.



## 4-1 SERVO ADJUSTMENT

TEST DISC : MCD-111 (or YEDS-18)

## 4-1 サーボ調整

テストディスク : MCD-111 (または YEDS-18)

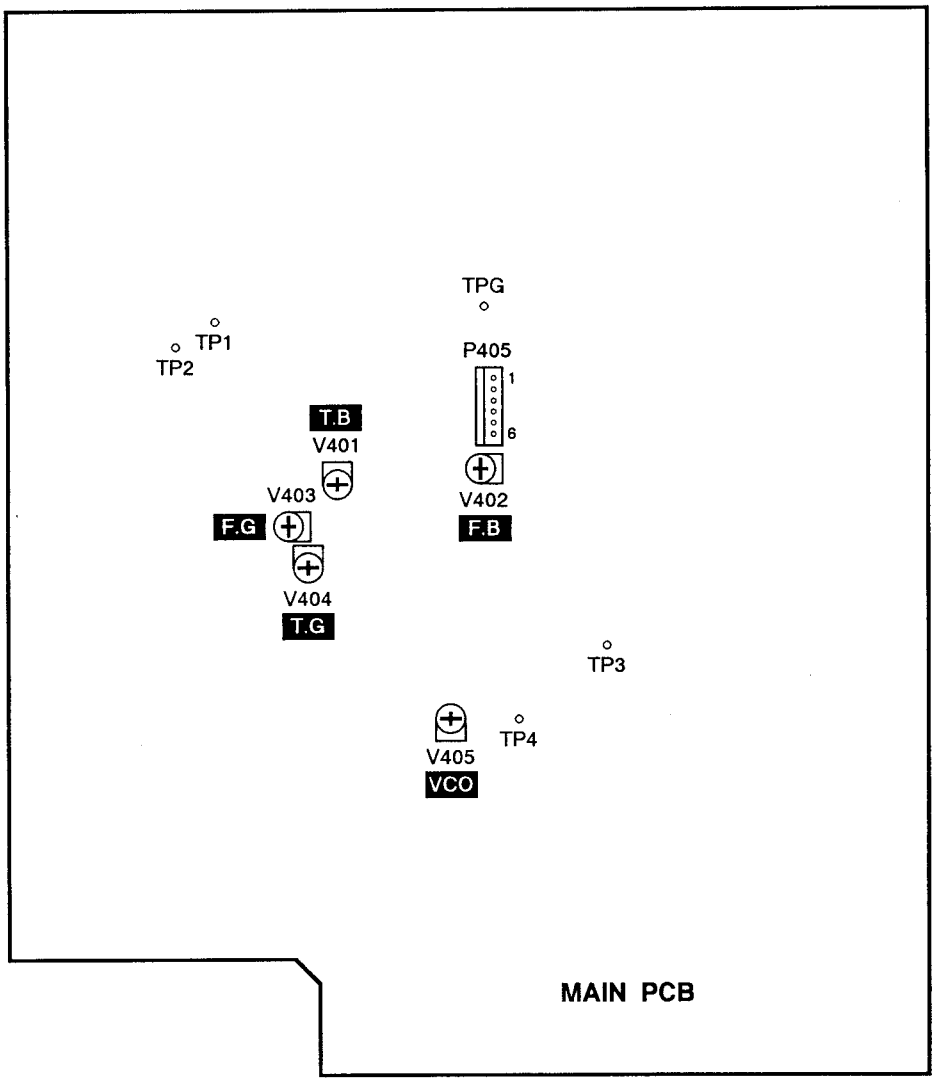



Fig. 4-5

### 4-1-1 Checking the pickup actuator operation

Before loading the disc, turn the power ON and check that the pickup actuator moves up and down three times. (If the pickup is not at inside on the disc, perform the above operation after moving the pickup to the inside.)

### 4-1-1 ピックアップアクチュエーター動作チェック

電源ON時ピックアップアクチュエーターが3回上下動すること。(ピックアップが最内周にないときは、最内周に移動後上記動作すること。) ディスクは装着しない。

### 4-1-2 Adjusting the PLL frequency

1. With the tray open, connect the frequency counter between TP3 and TPG, and short circuit between TP4 and TPG.
2. Adjust V405 (VCO) so that the PLL frequency is 4.3218MHz ± 0.05MHz at the stop mode.
   For this, use a × 10 sync probe with the frequency counter.

### 4-1-2 PLL周波数調整

1. トレイを開けた状態で、TP3とTPG間に周波数カウンターを接続し、TP4とTPGをショートする。
2. ストップ状態での周波数が4.3218MHz ± 0.05MHzになるようにV405 (VCO)を調整する。
   周波数カウンターはオシロ用プローブ×10を使用する。

### 4-1-3 Tracking balance adjustment

1. Connect the oscilloscope between P405-1 (TE) and P405-6 (GND), and press the SEARCH (◀◀ or ▶▶) button.
2. Adjust V401 (T.B) so that the upper and lower amplitudes of the tracking error signal waveform become equal above and below 0V.

### 4-1-3 トラッキングバランス調整

1. P405-1 (TE)とP405-6 (GND)間にオシロスコープを接続し、SEARCHボタン(◀◀または▶▶)を押す。
2. トラッキングエラー信号の波形が0Vを中心に振れるようV401 (T.B)を調整する。

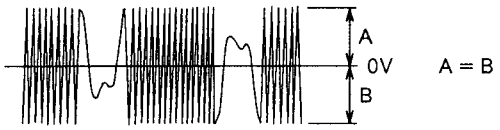



Fig. 4-6

### 4-1-4 Focus offset adjustment

1. Connect the oscilloscope between P405-5 (RF) and P405-6 (GND).
2. In the play mode, adjust V402 (F.B) so that the waveform on the oscilloscope becomes maximum.
3. After adjusting the focus offset, stop the player. Check for an offset voltage of 50mV or less at V403 center lead. If reading values are out of spec, adjust V402 again.

### 4-1-4 フォーカスオフセット調整

1. P405-5 (RF)とP405-6 (GND)間にオシロスコープを接続する。
2. PLAY状態でオシロスコープの波形が最大になるようにV402 (F.B)を調整する。
3. フォーカスオフセット調整後STOP状態にして、V403センターリードのオフセット電圧が50mV以下であることを確認する。もし規格に入らない場合は再度V402を調整する。

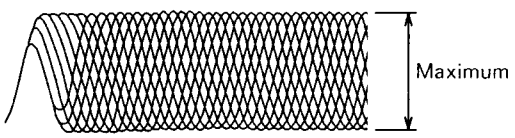



Fig. 4-7

### 4-1-5 Focus gain adjustment

1. Apply 1.17kHz／10Vp-p (When using MCD-111) or 1.14kHz／10Vp-p (When using YEDS-18) to P405-4 (FE II) from an external OSC via 100k Ω resistor.
2. Play the track 4, and adjust V403(F.G) so that phase at P405-3(FE I) is 90° with respect to that of the external OSC.

### 4-1-5 フォーカスゲイン調整

1. 外部OSCより100kΩの抵抗を介して1.17kHz／10Vp-p (MCD-111にて調整時)または1.14kHz／10Vp-p(YEDS-18にて調整時)の信号をP405-4(FE II)に入力する。
2. 4曲目を再生し、P405-3(FE I)と外部OSCとの位相が90°になるようにV403(F.G)を調整する。

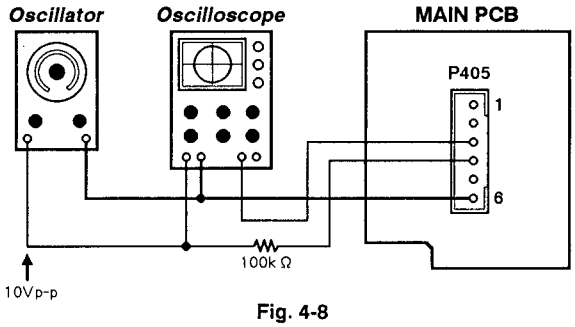



Fig. 4-8

### 4-1-6 Tracking gain adjustment

1. Apply 1.70kHz／10Vp-p (When using MCD-111) or 1.51kHz／10Vp-p (When using YEDS-18) to P405-2 (TE II) from an external OSC via 100k Ω resistor.
2. Play the track 4, and adjust V404(T.G) so that phase at P405-1(TE I) is 90° with respect to that of the external OSC.

### 4-1-6 トラッキングゲイン調整

1. 外部OSCより100kΩの抵抗を介して1.70kHz／10Vp-p (MCD-111にて調整時)または1.51kHz／10Vp-p(YEDS-18にて調整時)の信号をP405-2(TE II)に入力する。
2. 4曲目を再生し、P405-1(TE I)と外部OSCとの位相が90°になるようにV404(T.G)を調整する。

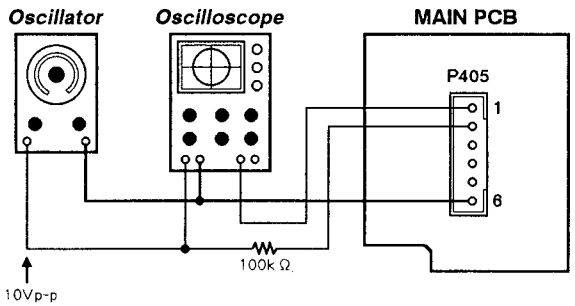



Fig. 4-9

## 4-2 ELECTRICAL CHARACTERISTICS 電気特性

| ITEM 項目 | DISC: MCD-111 (YEDS-18) | | SPECIFICATIONS 規格 | REMARKS 備考 |
|---|---|---|---|---|
| | TRACK No. トラック | FREQUENCY 周波数 | | |
| **1. Output level** 出力レベル | 2 | 1kHz | 1.7 ± 0.5Vrms | |
| **2. Channel level difference** チャンネルレベル差 | 2 | 1kHz | 1.0dB or less | |
| **3. Phones level** ヘッドホンレベル | 2 | 1kHz | 0.62 ± 0.3Vrms | 33 Ω load<br>OUTPUT level : max. |
| **4. Harmonic distortion** 高調波歪率 | 2 | 1kHz | 0.009 % or less | 400Hz~20kHz filter in |
| **5. Frequency response** 周波数特性 | 3~6 | 20Hz~20kHz | Within ± 1.0dB | reference level: 1kHz |
| **6. S/N ratio** S／N比 | 7 | | 92dB or better | DIN AUDIO<br>(Use SHIBASOKU 725 or equivalent) |
| **7. Channel separation** チャンネル セパレーション | 8, 10 | 1kHz | 85dB or better | DIN AUDIO |
| **8. Emphasis effect** エンファシス効果 | 13 | 16kHz | MCD-111 :<br>− 20 +1.0/−1.5dB<br>YEDS-18 :<br>− 9 +1.0/−1.5dB | reference level: 1kHz |

# PARTS LIST SECTION

## NOTES

- PC boards shown are viewed from parts side.
- Parts marked with ＊ require longer delivery time.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts of [ ] mark can be used only with the version designated.
  [J]:JAPAN [US]:U.S.A. [C]:CANADA [GE]:GENERAL EXPORT
  [E]:EUROPE [UK]:U.K. [A]:AUSTRALIA
  CD-3N:Gold Version, CD-3B:Black Version

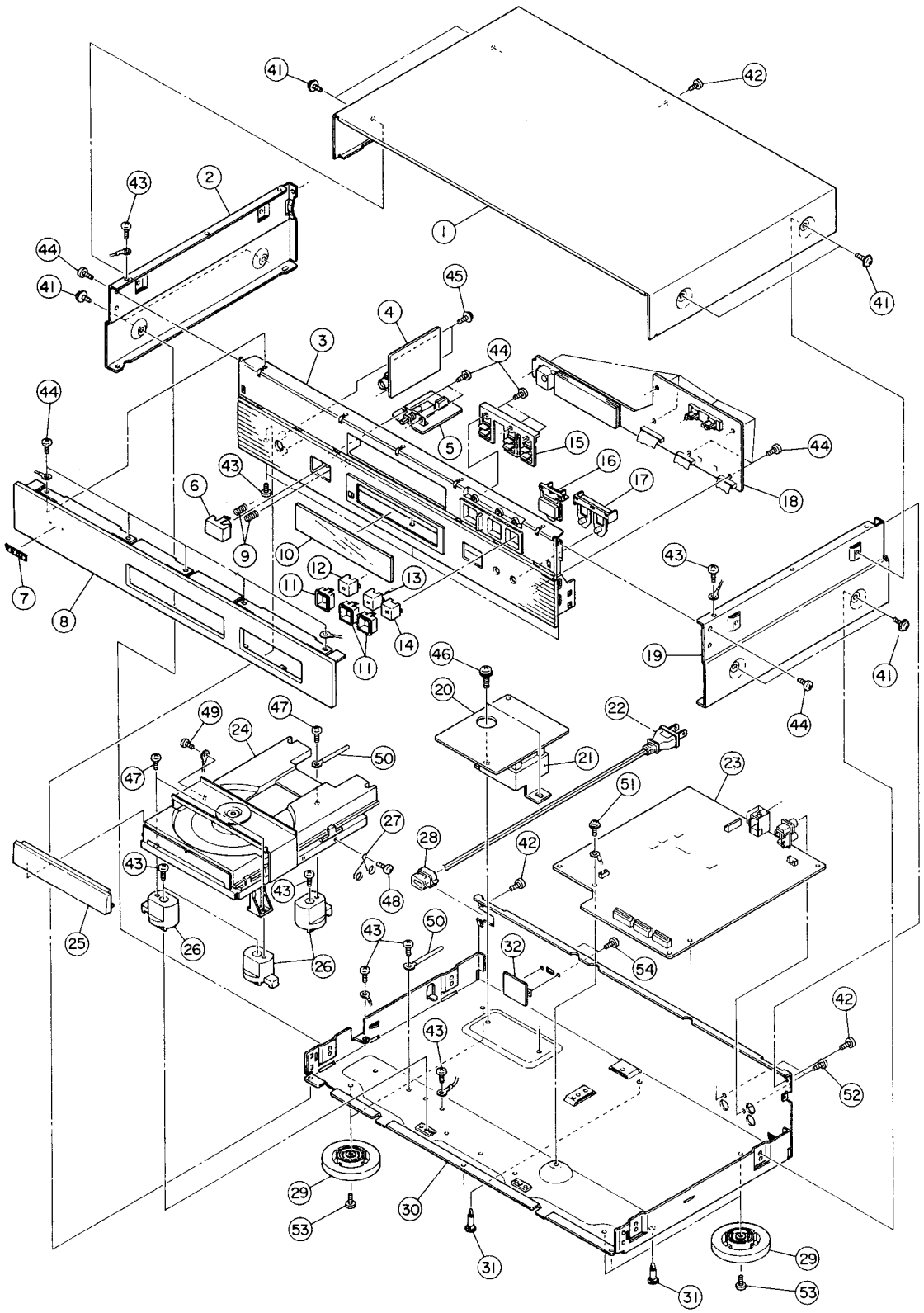
## 注　意

- プリント基板図は部品面が示されています。
- ＊印の部品は納期が若干かかります。
  あらかじめご了承ください。
- 分解図に部番のない部品及び品番のない部品は供給しません。
- 標準の抵抗、コンデンサーは省略してあります。
  回路図を参照してください。
- ⚠印は安全重要部品です。
  交換する時は必ずティアック指定の部品を使用してください。
- 仕向先
  [J]:JAPAN [US]:U.S.A. [C]:CANADA [GE]:GENERAL EXPORT
  [E]:EUROPE [UK]:U.K. [A]:AUSTRALIA
  CD-3N:Gold Version, CD-3B:Black Version

# 5 EXPLODED VIEWS AND PARTS LIST

分解図とパーツリスト

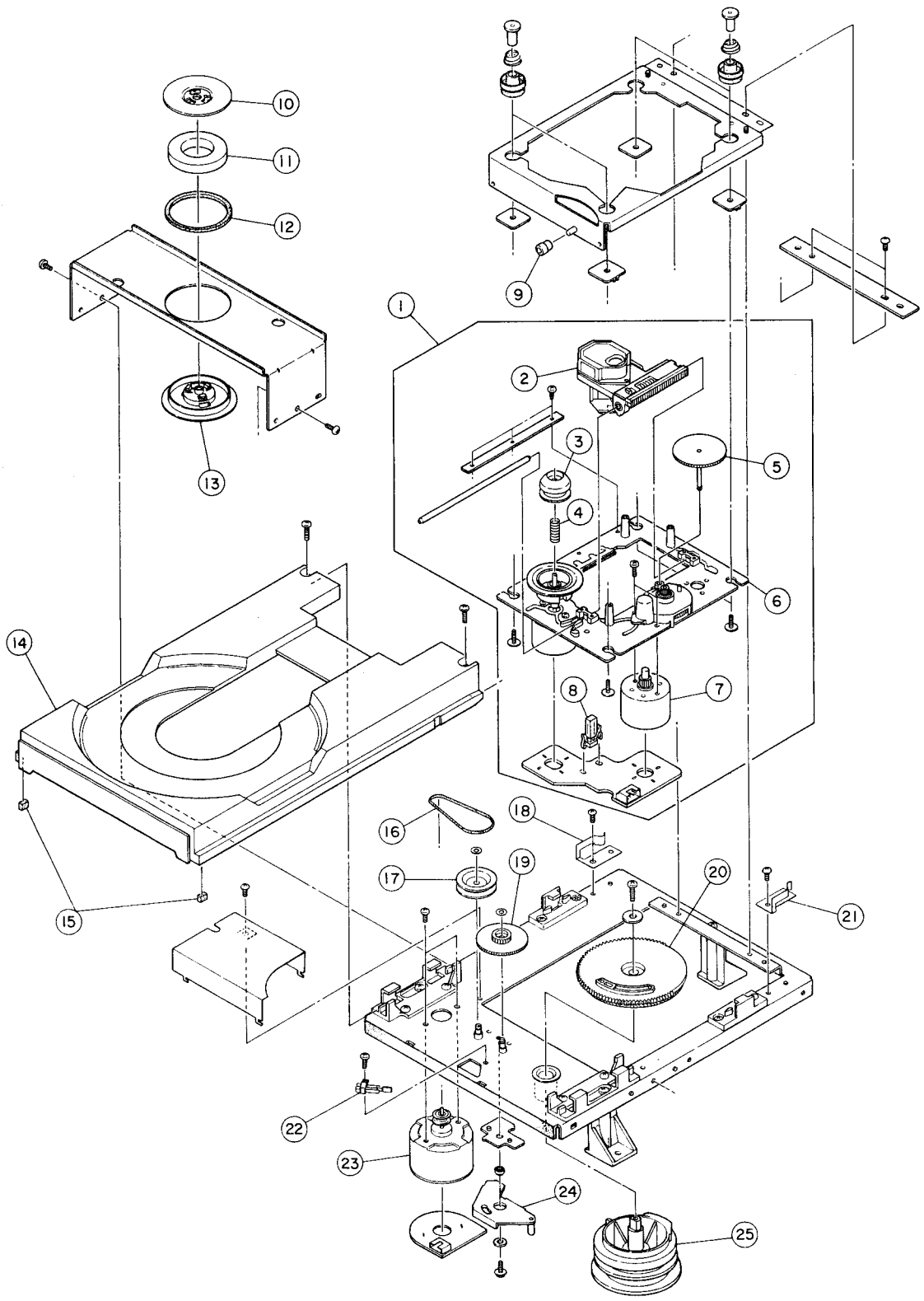
EXPLODED VIEW-1



## EXPLODED VIEW-1

| REF.NO. | PARTS NO. | DESCRIPTION | REMARKS |
|---|---|---|---|
| 1- 1 | *9260193502 | BONNET, N | CD-3N |
| | *9260189702 | BONNET, B | CD-3B |
| 1- 2 | *9260193301 | SIDE PANEL, L-N | CD-3N |
| | *9260189801 | SIDE PANEL, L-B | CD-3B |
| 1- 3 | *9260189202 | FRONT ESCUTCHEON, N | CD-3N |
| | *9260189102 | FRONT ESCUTCHEON, B | CD-3B |
| 1- 4 | *9145126201 | PHONE PCB ASSY, B | |
| 1- 5 | *9145126300 | POWER SW PCB ASSY | |
| 1- 6 | 9260190800 | POWER BUTTON, N | CD-3N |
| | 9260190700 | POWER BUTTON, B | CD-3B |
| 1- 7 | *5801533700 | EMBLEM, TEAC | CD-3N |
| | *5801413200 | NAME PLATE, TEAC | CD-3B |
| 1- 8 | *9260190401 | FRONT PANEL, N | CD-3N |
| | *9260190301 | FRONT PANEL, B | CD-3B |
| 1- 9 | 9260193600 | BOTTON SPRING | |
| 1-10 | *9260192100 | FL WINDOW | |
| 1-11 | *5801530500 | CAP ESCUTCHEON | |
| 1-12 | 5801530801 | PLAY CAP, ST | |
| 1-13 | 5801530601 | PLAY CAP, PL | |
| 1-14 | 5801530701 | PLAY CAP, PA | |
| 1-15 | *9260190900 | BOTTON HINGE | |
| 1-16 | 9260191300 | O/C BUTTON, N | CD-3N |
| | 9260191200 | O/C BUTTON, B | CD-3B |
| 1-17 | 9260191500 | SKIP BUTTON, N | CD-3N |
| | 9260191400 | SKIP BUTTON, B | CD-3B |
| 1-18 | *9145126100 | KEY PCB ASSY | |
| 1-19 | *9260193101 | SIDE PANEL, R-N | CD-3N |
| | *9260190101 | SIDE PANEL, R-B | CD-3B |
| 1-20 | *9145126500 | POWER TRANS PCB ASSY, C [US,C,GE] | |
| | *9145126510 | POWER TRANS PCB ASSY, C [E,UK,A] | |
| | *9145126520 | POWER TRANS PCB ASSY, C [GE] | |
| | *9145126530 | POWER TRANS PCB ASSY, C [J] | |
| 1-21 | ⚠ 9125080201 | POWER TRANSFORMER [E,UK,A] | |
| | ⚠ 9125080303 | POWER TRANSFORMER [US,C,GE] | |
| | ⚠ 9125080500 | POWER TRANSFORMER [J] | |
| 1-22 | ⚠ 9109025710 | AC CORD [E] | |
| | ⚠ 9109025810 | AC CORD [GE] | |
| | ⚠ 9109026010 | AC CORD [A] | |
| | ⚠ 9109026111 | AC CORD [J] | |
| | ⚠ 9109026210 | AC CORD [US,C,GE] | |
| | ⚠ 9109027300 | AC CORD [UK] | |
| 1-23 | *9145118109 | MAIN PCB ASSY | |
| 1-24 | *9278256400 | CD MECHA.ASSY | |
| 1-25 | *9260191100 | TRAY PANEL, N | CD-3N |
| | *9260191000 | TRAY PANEL, B | CD-3B |
| 1-26 | *9260119802 | MECHANISM BASE | |
| 1-27 | *9260126400 | CLAMPER (A) | |
| 1-28 | ⚠ 9121000102 | BUSHING, #2271 | |
| 1-29 | 9260113901 | FOOT ASSY | |
| 1-30 | ---------- | MAIN CHASSIS | |
| 1-31 | *9260124200 | PCB SUPPORT | |
| 1-32 | *9145126400 | SELECTOR SW PCB ASSY [US,C,GE] | |
| 1-41 | *9783053006 | SCREW, CAP-S M3X6 (BLK) | |
| 1-42 | *9783593008 | SCREW, C-TITE M3X8 (NI-BLK) | |
| 1-43 | *9783203006 | SCREW, BTT-S M3X6 | |
| 1-44 | *9783603008 | SCREW, BTT-P M3X8 | |
| 1-45 | *9783413008 | SCREW, CAP-P M3X8 (BLK) | |
| 1-46 | *9783294008 | SCREW, BTB-S M4X8 | |
| 1-47 | *9783603010 | SCREW, BTT-P M3X10 | |
| 1-48 | *9783102606 | SCREW, CAP-S M2.6X6 | |
| 1-49 | *9783202606 | SCREW, BTT-S M2.6X6 | |
| 1-50 | *9788823059 | WIRE CLAMPER | |
| 1-51 | *9783103006 | SCREW, CAP-S M3X6 | |
| 1-52 | *9783613008 | SCREW, BTT-P M3X8 (BLK) | |
| 1-53 | *9783203008 | SCREW, BTT-S M3X8 | |
| 1-54 | *9783233006 | SCREW, BTT-S M3X6 (BLK) | |

EXPLODED VIEW-2



## EXPLODED VIEW-2

| REF.NO. | PARTS NO. | DESCRIPTION | REMARKS |
|---|---|---|---|
| 2- 1 | ---------- | DRIVE UNIT | |
| 2- 2 | 9278321500 | PICK UP, KSS-210A | |
| 2- 3 | *9278321400 | CENTER RING (LO) | |
| 2- 4 | *9278321300 | SPRING (S) | |
| 2- 5 | 9278321600 | TOOTH GEAR (A) | |
| 2- 6 | 9278321700 | TT CHASSIS ASSY (MB) | |
| 2- 7 | 9278321800 | MOTOR GEAR ASSY (MR) | |
| 2- 8 | 9278322000 | SW, LEAF | |
| 2- 9 | *9278317400 | ROLLER (SP) | |
| 2-10 | *9278317000 | CHUCKING YOKE (SP) | |
| 2-11 | *9278316900 | MAGNET | |
| 2-12 | *9278316800 | DAMPER | |
| 2-13 | 9278316500 | CHUCKING PULLEY (AU) | |
| 2-14 | *9278316200 | TRAY (SP) | |
| 2-15 | *9278316300 | DAMPER | |
| 2-16 | 9278318700 | LM BELT | |
| 2-17 | 9278318900 | LOADING PULLEY | |
| 2-18 | *9278319300 | TRAY HOLDER (R) SP | |
| 2-19 | 9278319100 | MIDDLE GEAR (SP) | |
| 2-20 | 9278318500 | DRIVER GEAR (SP) | |
| 2-21 | *9278319400 | TRAY HOLDER (L) SP | |
| 2-22 | 9278320000 | SW, LEAF | |
| 2-23 | 9278321100 | MOTOR ASSY | |
| 2-24 | *9278320500 | STOPPER LINK ASSY (AU) | |
| 2-25 | 9278320300 | CONTROL CAM (SP) | |

# 6 PC BOARDS AND PARTS LIST

基板図とパーツリスト

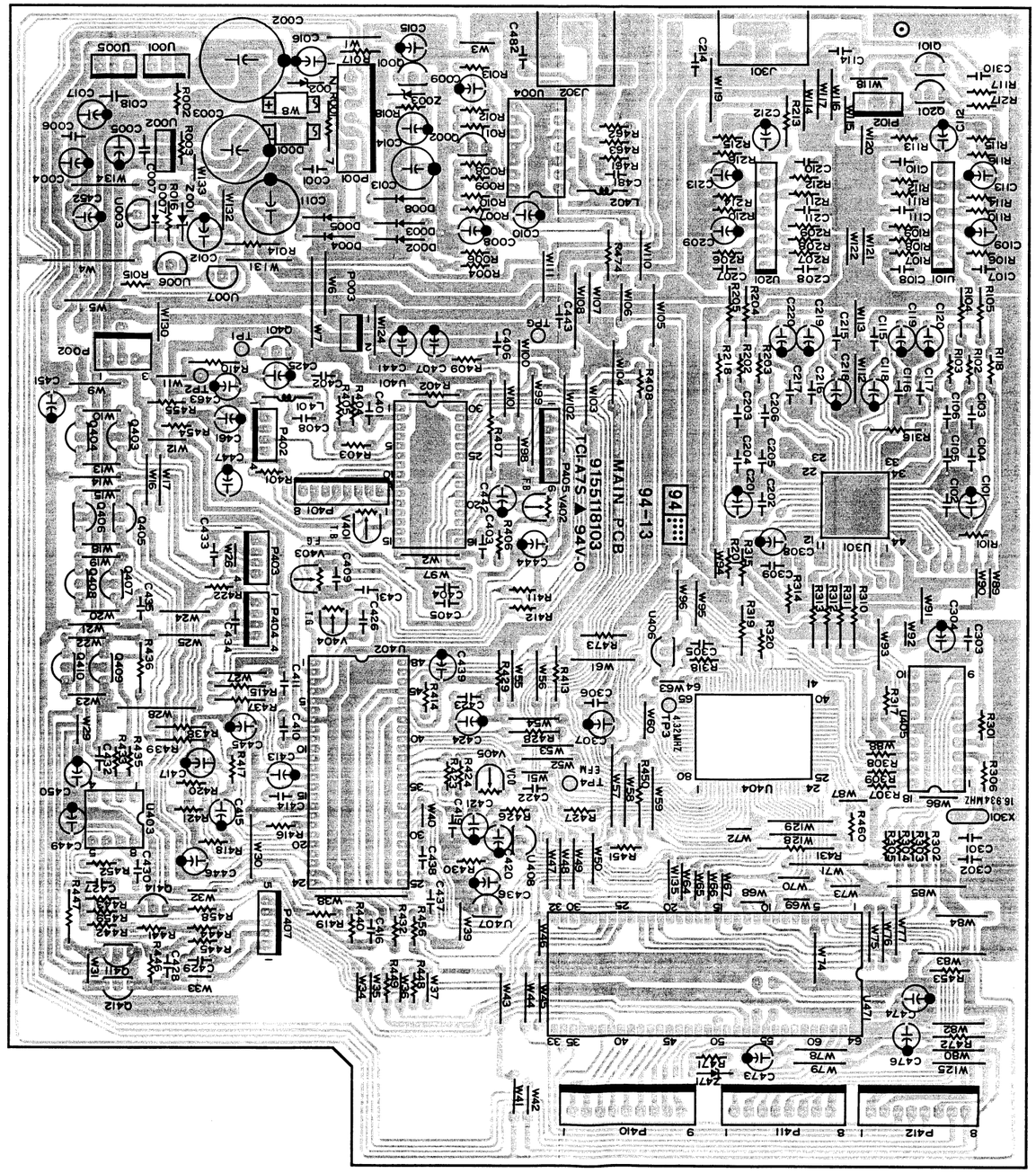
## MAIN PCB ASSY

| REF.NO. | PARTS NO. | DESCRIPTION |
|---|---|---|
| | *9145118109 | MAIN PCB ASSY |
| | *9155118103 | MAIN PCB |
| C002 | ⚠ 9117302200 | C, ELEC 4700UF/16V |
| C003 | ⚠ 9117273510 | C, ELEC 2200UF/16V |
| C011 | ⚠ 9117258000 | C, ELEC 1000UF/16V |
| D001 | ⚠ 9165021700 | DIODE, RECTIFIER PBDF103 |
| D002-005 | ⚠ 9165020550 | DIODE, 1N4003 |
| D007 | 9165020250 | DIODE, 1S1555 |
| D008 | 9165020550 | DIODE, 1N4003 |
| J301 | 9143280000 | PIN JACK, 2P |
| J302 | 9143249000 | PIN JACK, 1P |
| J302 | 9260124400 | EARTH PLATE (B) |
| L401 | 9122018810 | COIL, 10UH |
| L402 | 9122019250 | COIL, 4.7UH |
| P001 | 9143255000 | CONNECTOR PLUG, 7P |
| P002 | 9143251000 | CONNECTOR PLUG, 3P |
| P003 | 9143170000 | CONNECTOR PLUG, 2P |
| P102 | 9143232000 | CONNECTOR PLUG, 4P |
| P401 | 9143236000 | CONNECTOR PLUG, 8P (WHT) |
| P402 | 9143232020 | CONNECTOR PLUG, 4P (RED) |
| P403 | 9143232000 | CONNECTOR PLUG, 4P |
| P404 | 9143232010 | CONNECTOR PLUG, 4P (BLK) |
| P405 | 9143234000 | CONNECTOR PLUG, 6P (WHT) |
| P407 | 9143233000 | CONNECTOR PLUG, 5P (WHT) |
| P410 | 9143257000 | CONNECTOR PLUG, 9P |
| P411,412 | 9143256000 | CONNECTOR PLUG, 8P |
| Q001 | 9163202400 | TR, 2SB562C |
| Q002 | 9163310520 | TR, 2SC1740SLN/S |
| Q101,201 | 9163310520 | TR, 2SC1740SLN/S |
| Q401 | 9163202400 | TR, 2SB562C |
| Q403 | 9163609600 | TR, 2SD774K4 |
| Q404 | 9163202400 | TR, 2SB562C |
| Q405 | 9163609700 | TR, 2SD468C |
| Q406 | 9163202400 | TR, 2SB562C |
| Q407 | 9163609700 | TR, 2SD468C |
| Q408 | 9163202400 | TR, 2SB562C |
| Q409 | 9163609700 | TR, 2SD468C |
| Q410 | 9163202400 | TR, 2SB562C |
| Q411 | 9163609600 | TR, 2SD774K4 |
| Q412 | 9163202300 | TR, 2SB734K4 |
| Q414 | 9163202400 | TR, 2SB562C |
| R104,204 | 9111101053 | R, METAL R-16 30K F |
| R105,205 | 9111101053 | R, METAL R-16 30K F |
| R106,206 | 9111101053 | R, METAL R-16 30K F |
| R107,207 | 9111101053 | R, METAL R-16 30K F |
| R109,209 | 9113175200 | R, METAL PROI 1W 560 J |
| R111,211 | 9113176200 | R, METAL PROI 1W 750 J |
| R112,212 | 9113175200 | R, METAL PROI 1W 560 J |
| R115,215 | 9113177200 | R, METAL PROI 1W 1K J |
| TGP | 9160012600 | PIN T.P |
| TP 1- 4 | 9160012600 | PIN T.P |
| U001,005 | ⚠ 9167014800 | IC, NJM7805FA |
| U002 | ⚠ 9167014900 | IC, MJM7905FA |
| U003,006 | 9163011420 | TR, DTA114ES |
| U004 | 9167014700 | IC, UPD74HC04C |

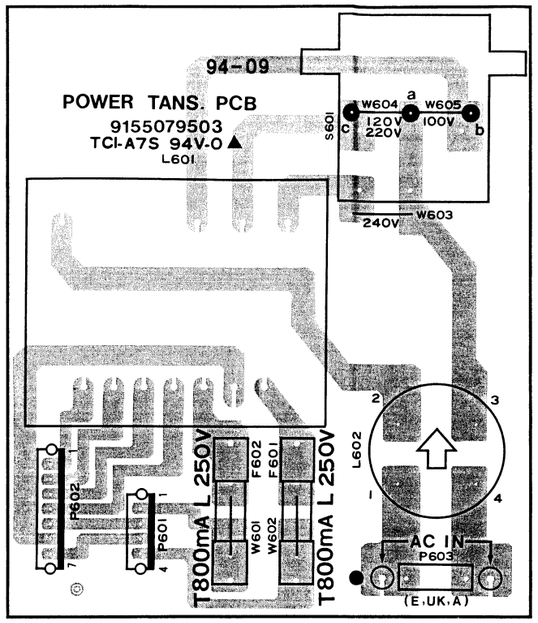
## MAIN PCB ASSY

| REF.NO. | PARTS NO. | DESCRIPTION |
|---|---|---|
| U007 | 9163313220 | TR, DTC114ES |
| U101,201 | 9167015800 | IC, NJM4565L |
| U301 | 5220099700 | IC, SAA7350GP |
| U401 | 9167023800 | IC, CXA1081S |
| U402 | 9167023900 | IC, CXA1082BS |
| U402 | 5347023300 | SHIELD SHEET, 10X32 |
| U403 | 5220418800 | IC, M5218P |
| U404 | 9167024000 | IC, CXD1167Q |
| U405 | 5220099800 | IC, SM5840AP |
| U405 | 5347026200 | SHEILD SHEET, 19X5 |
| U406-408 | 9163313220 | TR, DTC114ES |
| U471 | 5220829500 | IC, UPD75208CW-B43 |
| U471 | 5347023400 | SHEILD SHEET, 12X50 |
| V401 | 9112057010 | VR, SEMI-FIXED 22K (B) |
| V402 | 9112056010 | VR, SEMI-FIXED 4.7K (B) |
| V403,404 | 9112057010 | VR, SEMI-FIXED 22K (B) |
| V405 | 9112058010 | VR, SEMI-FIXED 1K (B) |
| X301 | 5347010900 | OSC, CRYSTAL 16.9344MHZ |
| X301 | 5347023300 | SHIELD SHEET, 10X32 |
| Z001,002 | 9166032253 | ZENER DIODE, MTZ J 6.2A |
| Z003 | 9166033855 | ZENER DIODE, MTZ J 30C |
| Z471 | 9166032653 | ZENER DIODE, MTZ J 9.1A |

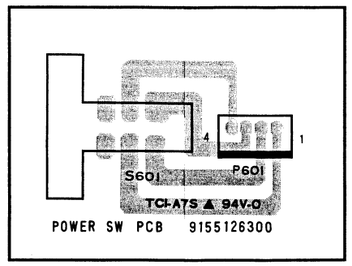
MAIN PCB



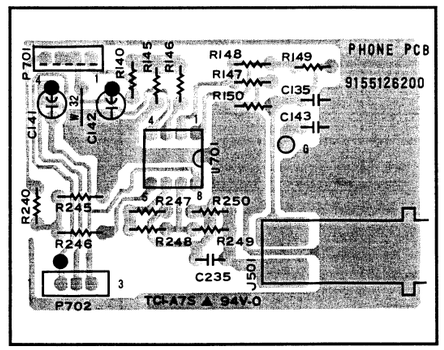
POWER TRANS. PCB



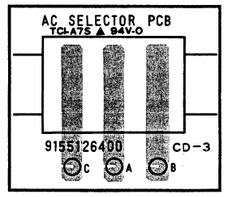

POWER SW PCB



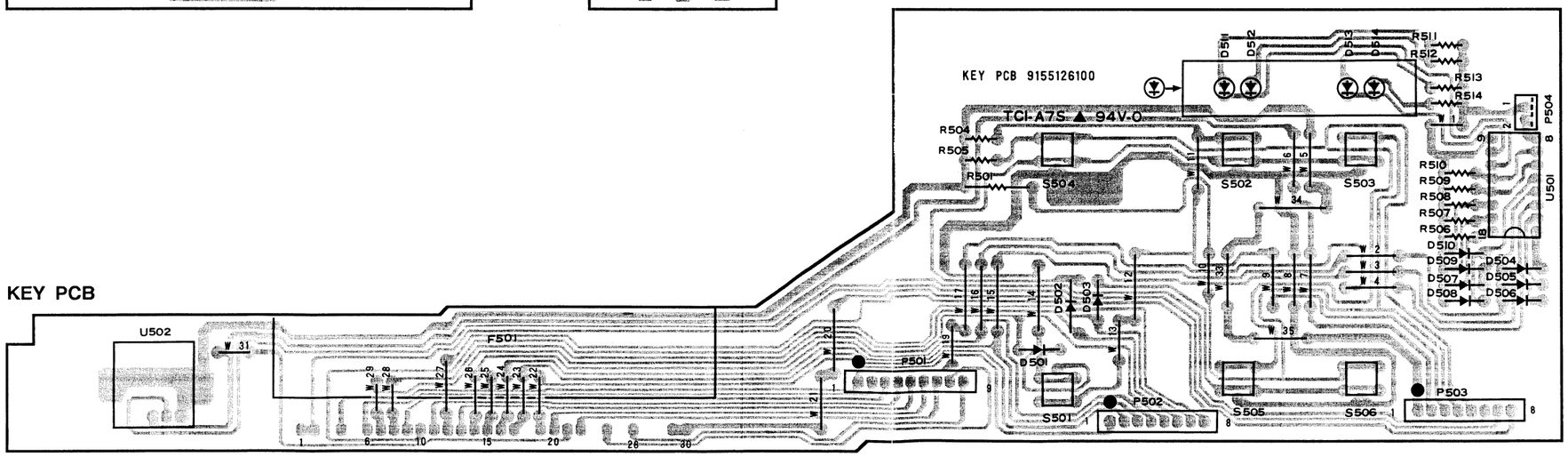

PHONE PCB



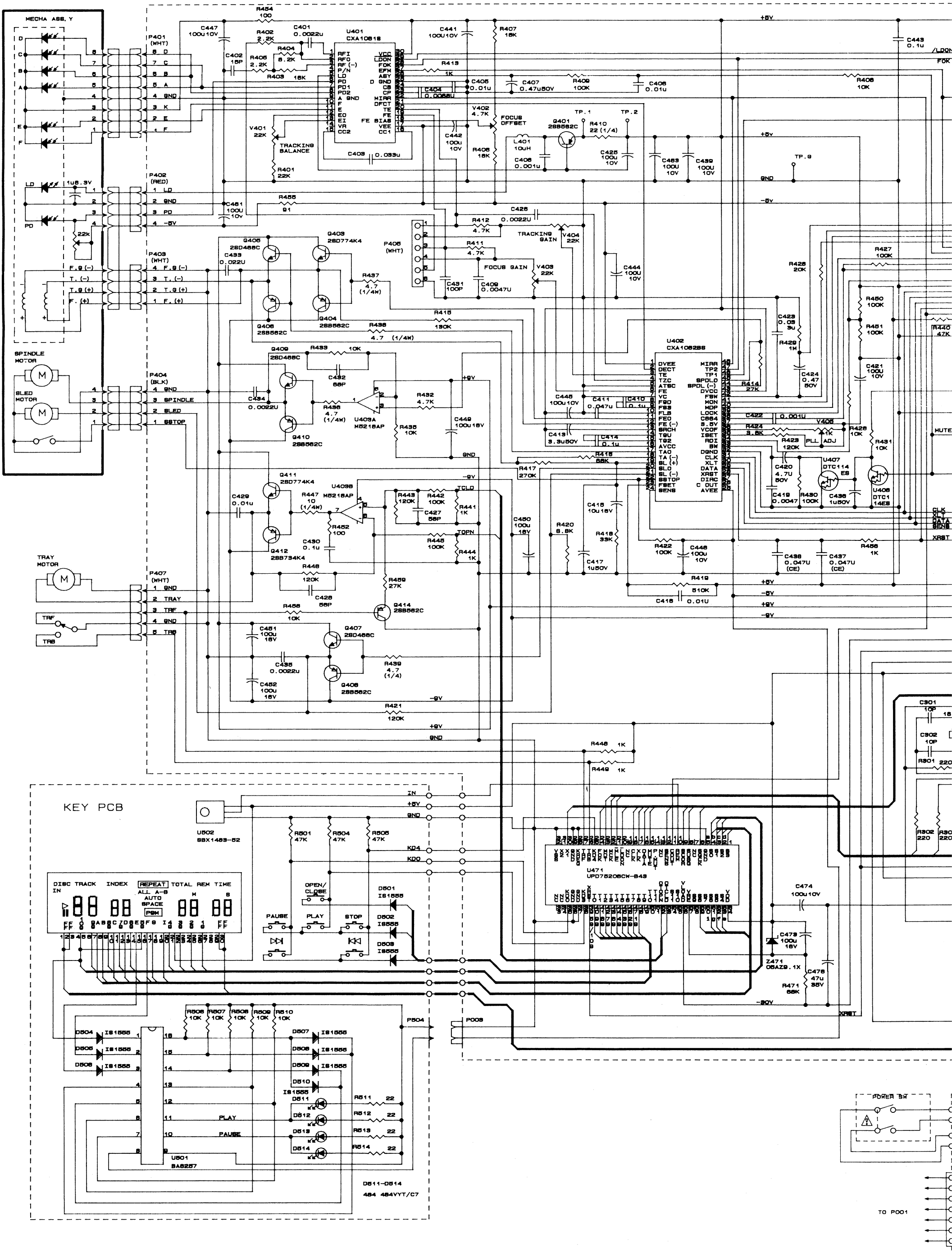

AC SELECTOR PCB




KEY PCB



# TEAC SCHEMATIC DIAGRAM CD-3




**INSTRUCTIONS FOR SERVICE PERSONNEL**

**BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.**

## NOTES:

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
2. Capacitor values are in microfarads (p=picofarads).
3. ⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

## 注意

1. 抵抗の単位はΩ（k＝kΩ, M＝MΩ）です。
2. コンデンサの単位はμF（p＝pF）です。
3. ⚠マークのある部品は安全規格重要部品です。
交換するときは必ずティアック指定の部品を使用してください。

MAIN PCB

HEAD PHONE PCB

# CD-3

## Compact Disc Player

1 st Issue; June 1994

## POWER TRANS. PCB ASSY

| REF.NO. | PARTS NO. | DESCRIPTION |
|---|---|---|
| | *9145126500 | POWER TRANS PCB ASSY,C [US,C,GE] |
| | *9145126510 | POWER TRANS PCB ASSY,C [E,UK,A] |
| | *9145126520 | POWER TRANS PCB ASSY,C [GE] |
| | *9145126530 | POWER TRANS PCB ASSY,C [J] |
| | *9155079503 | POWER TRANS PCB |
| ⚠ | 5292806300 | FILTER, FKOB16MH13 |
| | 5327009600 | TERMINAL LAPPING,2P[E,UK,A] |
| | 9143262100 | WIRE HOLDER, 4P |
| | 9143265100 | WIRE HOLDER, 7P |
| ⚠ | 5142186000 | FUSE, T-LAG 800MA/250V [E,UK,A] |
| | 9150018000 | FUSE HOLDER [E,UK,A] |

## POWER SW PCB ASSY

| REF.NO. | PARTS NO. | DESCRIPTION |
|---|---|---|
| | *9145126300 | POWER SW PCB ASSY |
| | *9155126300 | POWER SW PCB |
| ⚠ | 9135031000 | SW, POWER |
| | 9143252000 | CONNECTOR PLUG, 4P |

## SELECTOR SW PCB ASSY

| REF.NO. | PARTS NO. | DESCRIPTION |
|---|---|---|
| | *9145126400 | SELECTOR SW PCB ASSY [US,C,GE] |
| | *9155126400 | AC SELECTOR PCB |
| ⚠ | 9134010700 | SW, AC SELECTOR |

## PHONE PCB ASSY

| REF.NO. | PARTS NO. | DESCRIPTION |
|---|---|---|
| | *9145126201 | PHONE PCB ASSY, B |
| | *9155126200 | PHONE PCB |
| | 9143248000 | PHONE JACK |
| P702 | 9143261100 | WIRE HOLDER, 3P |
| U102 | 5220418800 | IC, M5218P |

## KEY PCB ASSY

| REF.NO. | PARTS NO. | DESCRIPTION |
|---|---|---|
| | *9145126100 | KEY PCB ASSY |
| | *9155126100 | KEY PCB |
| | *9260194700 | FL CUSHION, 18X12X7T |
| | *9260192000 | LED HOLDER |
| D501-510 | 9165020250 | DIODE, 1S1555 |
| D511-514 | 9174016200 | LED, 484VYT/C7 (YEL) |
| F501 | 5347017600 | FL DISPLAY, FIP10NM7-A |
| P501 | 9143267100 | WIRE HOLDER, 9P |
| P502,503 | 9143266100 | WIRE HOLDER, 8P |
| S501-506 | 9136000502 | SW, TACT |
| U501 | 9167025100 | IC, BA6257 |
| U502 | 9151001200 | REMOCON RECEIVER, LTM90524 |

## INCLUDED ACCESSORIES 付属品

| REF.NO. | PARTS NO. | DESCRIPTION | REMARKS |
|---|---|---|---|
| | *9101396700 | OWNER'S MANUAL, JAPANESE [J] | |
| | *9101396800 | OWNER'S MANUAL, 6-MULTI [EXCEPT J] | |
| | *9109027101 | IN-OUTPUT CORD | |
| | *9151002200 | REMOTE CONTROL UNIT, RC-532 | CD-3N |
| | *9151002100 | REMOTE CONTROL UNIT, RC-531 | CD-3B |
| | *5347016500 | BATTERY, UM-4 | |

# CD-3

# TEAC


## ティアック株式会社

| | | | |
|---|---|---|---|
| | オーディオ部 | ☎ (0422) 52-5073 | 〒180 東京都武蔵野市中町3－7－3 |
| 技術的なお問合わせ | AV技術相談室 | ☎ (0425) 60-7761 | 〒208 東京都武蔵村山市伊奈平2－11－1 |
| サービスに関するお問合わせは、最寄りの営業所等へご連絡ください.<br>営業所にはサービス・センターが併設されています. | 札幌営業所 | ☎ (011) 521-4101(代) | 〒064 札幌市中央区南7条西2－2 くぼたビル |
| | 仙台営業所 | ☎ (022) 227-1501(代) | 〒980 仙台市青葉区1番町2－5－5 中央ビル |
| | 新潟サービス | ☎ (025) 245-0103 | 〒950 新潟県新潟市本馬越1－4－11 黒井ハイツ |
| | 大宮サービス | ☎ (048) 642-4551(代) | 〒330 大宮市三橋2－8－46 |
| | 多摩サービス | ☎ (0425) 60-8918 | 〒208 東京都武蔵村山市伊奈平2－11－1 |
| | 東京サービス | ☎ (03) 3592-1827 | 〒100 東京都千代田区永田町2－10－7 星ガ岡会館 |
| | 千葉サービス | ☎ (043) 255-1281 | 〒260 千葉市中央区椿森1－21－13 清水ビル |
| | 西関東営業所 | ☎ (0427) 51-6771 | 〒229 相模原市千代田1－3－1 MIビル |
| | 静岡サービス | ☎ (054) 238-2431 | 〒422 静岡市高松1－12－1 寿道ハイツ105号 |
| | 名古屋営業所 | ☎ (052) 702-3100(代) | 〒465 名古屋市名東区上社5－406 |
| | 京都サービス | ☎ (075) 871-8730(代) | 〒616 京都市右京区常盤窪町19 西垣ビル |
| | 大阪営業所 | ☎ (06) 384-5201(代) | 〒564 吹田市垂水町3－34－10 |
| | 岡山サービス | ☎ (0862) 25-8601 | 〒700 岡山市新保1142－6 |
| | 広島営業所 | ☎ (082) 294-4751(代) | 〒730 広島市中区西川口町13－19 |
| | 福岡営業所 | ☎ (092) 431-5781(代) | 〒812 福岡市博多区東光2－2－24 |
| | 福岡サービス | ☎ (092) 936-5672 | 〒811-22 福岡県粕屋郡志免町志免1041 |

| | | |
|---|---|---|
| **TEAC CORPORATION** | 3-7-3, Nakacho, Musashino-shi, Tokyo 180, Japan | Phone:(0422)52-5081 |
| TEAC AMERICA, INC. | 7733 Telegraph Road, Montebello, California 90640 | Phone:(213)726-0303 |
| TEAC CANADA LTD. | 340 Brunel Road, Mississauga, Ontario L4Z 2C2, Canada | Phone:905-890-8008 |
| TEAC UK LIMITED | 5 Marlin House, Marlins Meadow, The Croxley Centre, Watford, Herts. WD1 8YA, U.K. | Phone:0923-819631 |
| TEAC DEUTSCHLAND GmbH | Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany | Phone:0611-71580 |
| TEAC FRANCE S.A. | 17, Rue Alexis-de-Tocqueville, CE 005 92182 Antony Cedex, France | Phone:(1)42.37.01.02 |
| TEAC NEDERLAND BV | Perkinsbaan 11, 3439 ND Nieuwegein, Nederland | Phone:03-402-30229 |
| TEAC AUSTRALIA PTY., LTD.<br>A.C.N. 005 408 462 | 106 Bay Street, Port Melborne, Victoria 3207, Australia | Phone:(03)646-1733 |
| TEAC ITALIANA S.p.A. | Via C. Cantù 5, Cinisello Balsamo, Milano, Italy | Phone:02-66010500 |


PRINTED IN JAPAN 0694SK 0.54 M-0936A